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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,638

12/22/2006

Barton Haynes

1579-1093

4199

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EXAMINER

PARKIN, JEFFREY S

ART UNIT

PAPER NUMBER

1648

MAIL DATE

DELIVERY MODE

01/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/572,638	<b>Applicant(s)</b> HAYNES ET AL.	
	<b>Examiner</b> Jeffrey S. Parkin	<b>Art Unit</b> 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 01 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 97-107 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 97-107 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Office Action**

***Status of the Claims***

Acknowledgement is hereby made of receipt and entry of the communication filed 17 March, 2006, wherein claims 1-96 were cancelled without prejudice or disclaimer and new claims 97-107 submitted. Claims 97-107 are pending in the instant application.

***Unity of Invention: Multiple Inventions***

This application was filed under 35 U.S.C. § 371 and is subject to unity of invention practice pursuant to 35 U.S.C. § 121 and 372. The regulations governing the claiming of different inventions in one national application are set forth under 37 C.F.R. § 1.141, 1.475, and 1.499. Applicants are reminded that if multiple products, processes of manufacture, or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto, will be considered as the main invention in the claims (refer to PCT Article 17(3)(a) and § 1.476(c)). The following groups have been identified in this application:

- a. Group I, claim(s) 97 and 106, drawn to an isolated protein as set forth in the identified figures (e.g., Fig. 1A, Fig. 6C, Fig. 6D., etc.).
- b. Group II, claim(s) 98-100, 105, and 106, drawn to a nucleic acid encoding an isolated protein as set forth in the identified figures (e.g., Fig. 1A, Fig. 6C, Fig. 6D, etc.).
- c. Group III, claim(s) 101, 102, 105, and 106, drawn to a nucleic acid encoding a consensus protein as set forth in

the identified figures (e.g., Fig. 26A, Fig. 28B, Fig. 29B, etc.).

- d. Group IV, claim(s) 103 and 106, drawn to an isolated protein as set forth in the identified figures (e.g., Fig. 39A, Fig. 39B, Fig. 62B, etc.).
- e. Group V, claim(s) 104, 105, and 106, drawn to a nucleic acid encoding a protein as set forth in the identified figures (e.g., Fig. 39A, Fig. 39B, Fig. 62B, etc.).
- f. Group VI, claim(s) 107, drawn to a method of inducing an immune response in a mammal by administering an isolated protein as set forth in the identified figures (e.g., Fig. 1A, Fig. 6C, Fig. 6D., etc.).
- g. Group VII, claim(s) 107, drawn to a method of inducing an immune response in a mammal by administering a nucleic acid encoding an isolated protein as set forth in the identified figures (e.g., Fig. 1A, Fig. 6C, Fig. 6D, etc.).
- h. Group VIII, claim(s) 107, drawn to a method of inducing an immune response in a mammal by administering a nucleic acid encoding a consensus protein as set forth in the identified figures (e.g., Fig. 26A, Fig. 28B, Fig. 29B, etc.).
- i. Group IX, claim(s) 107, drawn to a method of inducing an immune response in a mammal by administering an isolated protein as set forth in the identified figures (e.g., Fig. 39A, Fig. 39B, Fig. 62B, etc.).
- j. Group X, claim(s) 107, drawn to a method of inducing an immune response in a mammal by administering a nucleic acid encoding a protein as set forth in the identified figures (e.g., Fig. 39A, Fig. 39B, Fig. 62B, etc.).

Groups I-X fail to share a special technical feature for the following reasons: Concerning groups I-V, each of the identified groups is directed toward structurally/functionally unrelated products. Concerning groups VI-X, each of the identified methods employs different products. Accordingly, the groups do not share

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a special technical feature. Moreover, **Applicants are advised that if one of Groups I-X are elected, a specific nucleotide or amino acid sequence must also be elected.** For instance, if Group I is elected, a specific amino acid sequence must also be elected from one of the sequences set forth in Figs. 1A, 6C, 6D, etc. Applicants are advised that this is **NOT** a species election requirement. Each of the identified sequences is structurally/functionally different and will necessitate separate searches. Because of the large number of sequences encompassed in the claims and the attendant search burden associated with examining all of these claims it is deemed appropriate to limit the invention to a single polypeptide/nucleotide sequence.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed. Applicant is also advised that the claims should be amended, where necessary, to reflect the restriction requirement and election.

**37 C.F.R. § 1.48(b)**

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

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***Correspondence***

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D., whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Bruce R. Campell, Ph.D., can be reached at (571) 272-0974. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Respectfully,

/Jeffrey S. Parkin/

Jeffrey S. Parkin, Ph.D.  
Primary Examiner  
Art Unit 1648

18 January, 2009